

Appn. Number 10/710,782 (Freitas) GAU 2837 Amnt. A contd. 11 of 18

ABSTRACT: Replace paragraph 40 with the following new abstract:

An electric ~~pereussion~~ musical instrument transducer contains an electrically charged or chargable vibrating surface one or more air gapped parallel plate variable capacitors. Each variable capacitor in the transducer has one plate that comprises, covers, or is embedded within an acoustically emitting vibrating surface on a musical instrument (such as a drumhead or soundboard) while the other plate is a rigid surface held a fixed distance away. When the instrument is played, the vibrating surface emits sound directly. It also creates electromagnetic disturbances that can be detected using appropriate electronic devices, thus enabling the instrument to produce signals describing the instrument's sound along with the sound itself causes vibrations directly (without using airborne sound as an intermediary) in the non-fixed plates of the variable capacitors, thus causing time-varying voltage oscillations in the variable capacitors that directly reflect the vibrational state, and therefore the sound, of the instrument. These voltage oscillations are then converted to signals that can be used by audio recording and amplification equipment.